

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/816,182	03/23/2001	Darwin J. Prockop	53844-5019	5852
75	90 10/01/2003			
MORGAN, LEWIS & BOCKIUS LLP 1701 Market Street Philadelphia, PA 19103			EXAMINER	
			FALK, ANNE MARIE	
			ART UNIT	PAPER NUMBER
			1632	4
			DATE MAILED: 10/01/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

:		FILE			
	Application No.	Applicant(s)			
	09/816,182	PROCKOP ET AL.			
Office Action Summary	Examiner	Art Unit			
	Anne-Marie Falk, Ph.D.	1632			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statu - Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b). Status	136(a). In no event, however, may a reply by within the statutory minimum of thirty (30 d will apply and will expire SIX (6) MONTHS te, cause the application to become ABAND	be timely filed) days will be considered timely. from the mailing date of this communication. ONED (35 U.S.C. § 133).			
1) Responsive to communication(s) filed on					
,	 his action is non-final.	·			
3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims 4)⊠ Claim(s) 1-10 is/are pending in the application	nn				
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
,—					
6) Claim(s) is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) <u>1-10</u> are subject to restriction and/or election requirement. Application Papers					
9)☐ The specification is objected to by the Examiner.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11) The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.					
If approved, corrected drawings are required in reply to this Office action.					
12) The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
14) Acknowledgment is made of a claim for domes					
a) ☐ The translation of the foreign language provisional application has been received. 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Inform	mary (PTO-413) Paper No(s) mal Patent Application (PTO-152) .			
U.S. Patent and Trademark Office PTOL-326 (Rev. 04-01) Office A	Action Summary	Part of Paper No. 4			

ø

DETAILED ACTION

Claims 1-10 are pending in the instant application.

Election/Restriction

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- Claims 1-3 and 9, drawn to a population of small and rapidly self-renewing stem (RS) cells, classified in class 435, subclass 325.
- II. Claims 4-6 and 10, drawn to a population of large, more mature marrow stromal cells (mMSC), classified in class 435, subclass 325.
- III. Claims 7 and 8, drawn to a method of distinguishing a population of small and rapidly self-renewing stem cells (RS) from a population of large, more mature marrow stromal cells (mMSC), classified in class 435, subclass 4.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are patentably distinct from each other because the inventions are drawn to distinct compositions that are not obvious variants. The cell population of the invention of Group I is structurally, biologically, and functionally different from the cell population of the invention of Group II. The different cell types are not obvious variants and are not disclosed as being used together. Thus, the compositions of the invention of Group I is patentably distinct from the composition of the invention of Group II.

Inventions I and III are patentably distinct from each other because the inventions are drawn to a distinct composition and a distinct method. Although a cell population of the invention of Group I could be used in the method of the invention of Group III, its use is not required as other distinct cell

Application/Control Number: 09/816,182

Art Unit: 1632

populations could be used in the method. Even when inventions are related as product and process of use, the inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP 806.05(h)). In the instant case the method of the invention of Group III can be practiced using any cell population as the starting material, as the method only requires determining the expression of various polypeptides within the cell population.

Inventions II and III are patentably distinct from each other because the inventions are drawn to a distinct composition and a distinct method. Although a cell population of the invention of Group II could be used in the method of the invention of Group III, its use is not required as other distinct cell populations could be used in the method. Even when inventions are related as product and process of use, the inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP 806.05(h)). In the instant case the method of the invention of Group III can be practiced using any cell population as the starting material, as the method only requires determining the expression of various polypeptides within the cell population.

Each of the inventions of Groups I-III requires consideration of separate issues relating to assessment of novelty, obviousness, utility, written description, and enablement. For example, the invention of Group I requires consideration of issues relating to the isolation of the claimed cell population, which is not required for examination of the invention of Group II. Furthermore, the searches for the inventions of Groups I-III are not coextensive. Thus, search and examination of all 3 inventions in a single patent application constitutes a serious burden on the Examiner.

Application/Control Number: 09/816,182

Art Unit: 1632

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their recognized divergent subject matter and because the searches required for the separate inventions are not coextensive, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne-Marie Falk whose telephone number is (703) 306-9155. The examiner can normally be reached Monday through Thursday and alternate Fridays from 10:00 AM to 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Reynolds, can be reached on (703) 305-4051. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the patent analyst, William Phillips, whose telephone number is (703) 305-3482.

Anne-Marie Falk, Ph.D.

Ame-marie Falk, PH.D

MARY EXAMINER